7. (Amended) A method of regeneration of bone or cartilage by administration of a DNA molecule, wherein said DNA molecule comprises a nucleotide sequence selected from the group consisting of: (1) SEQ ID NO: 18; (2) a nucleotide sequence having at least about 79% identity to SEQ ID NO: 18 and coding for a SOX-9 polypeptide; and (3) a nucleotide sequence which hybridizes to SEQ ID NO: 18 under standard hybridization conditions and encodes a SOX-9 polypeptide.

- 8. (Amended) A method of regeneration of bone or cartilage by administration of a DNA molecule, wherein said DNA molecule comprises a nucleotide sequence selected from the group consisting of: (1) SEQ ID NO: 20; (2) a nucleotide sequence having at least about 79% identity as SEQ ID NO: 20 and coding for a SOX-9 polypeptide; and (3) a nucleotide sequence which hybridizes to SEQ ID NO: 20 under standard hybridization conditions and encodes a SOX-9 polypeptide.
- 9. (Amended) A method of regeneration of bone or cartilage by administration of a recombinant protein, wherein said protein is encoded by a nucleotide sequence selected from the group consisting of: (1) SEQ ID NO: 18; (2) a nucleotide sequence having at least about 79% identity to SEQ ID NO: 18 and coding for a SOX-9 polypeptide; and (3) a nucleotide sequence which hybridizes to SEQ ID NO: 18 under standard hybridization conditions and encodes a SOX-9 polypeptide.
- 10. (Amended) A method of regeneration of bone or cartilage by administration of a recombinant protein, wherein said protein is encoded by a nucleotide sequence selected from the group consisting of: (1) SEQ ID NO: 20; (2) a nucleotide sequence having at least about 79% identity as SEQ ID NO: 20 and coding for a SOX-9 polypeptide; and (3) a nucleotide sequence



which hybridizes to SEQ ID NO: 20 under standard hybridization conditions and encodes a SOX-9 polypeptide.

Please add the following claims:

- 11. The method of claim 7, wherein said DNA molecule comprises a nucleotide sequence as set forth in SEQ ID NO: 18.
- 12. The method of claim 7, wherein said DNA molecule comprises a nucleotide sequence having at least about 79% identity to SEQ ID NO: 18 and coding for a SOX-9 polypeptide, and wherein said SOX-9 polypeptide comprises an amino acid sequence as set forth in SEQ ID NO: 19 or an amino acid sequence having at least about 93.5% identity to SEQ ID NO: 19.
- 13. The method of claim 7, wherein said DNA molecule hybridizes to SEQ ID NO: 18 under standard hybridization conditions and codes for a SOX-9 polypeptide, and wherein said SOX-9 polypeptide comprises an amino acid sequence as set forth in SEQ ID NO: 19 or an amino acid sequence having at least about 93.5% identity to SEQ ID NO: 19.
- 14. The method of claim 8, wherein said DNA molecule comprises a nucleotide sequence as set forth in SEQ ID NO: 20.
- 15. The method of claim 8, wherein said DNA molecule comprises a nucleotide sequence having at least about 79% identity to SEQ ID NO: 20 and coding for a SOX-9 polypeptide, and wherein said SOX-9 polypeptide comprises an amino acid sequence as set forth in SEQ ID NO: 21 or an amino acid sequence having at least about 93.5% identity to SEQ ID NO: 21.
- 16. The method of claim 8, wherein said DNA molecule hybridizes to SEQ ID NO: 20 under standard hybridization conditions and codes for a SOX-9 polypeptide, and wherein said